DOCUMENT RESUME

ED 327 622 UD 027 882

AUTHOR Catterall, James S.

TITLE Dropping Out of School in the North Central Region of

the United States: Costs and Consequences. Success

for Students at Risk.

INSTITUTION North Central Regional Educational Lab., Elmhurst,

IL.

SPONS AGENCY Ofice of Educational Research and Improvement (ED),

Washington, DC.

PUB DATE 8

NOTE 25p.; One is a Series of Reports on Students at

Risk.

AVAILABLE FROM North Central Regional Educational Laboratory, 295

Emroy Ave., Elmhurst, IL 60126 (Order no. SAR-712.

\$6.00).

PUB TYPE Reports - Research/inchnical (143)

EDES PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS Cost Effectiveness; Crime; *Dropouts; *Economic

Impact; High Schools; *Income; *Outcomes of

Education; Policy Formation; Poverty; Unemployment;

*Welfare Services

ABSTRACT

This study examines the individual and social costs associated with dropping out of high school in the North Central Region of the United States. Dropouts incur personal costs in the form of reduced earnings, higher chances of being unemployed, and higher likelihood of involvement with crime. Social costs appear in the form of lower total productivity of the labor force, lower tax collections, and higher needs for public services such as welfare, health, and employment services. Statistical data were analyzed from the 1980 U.S. Census and national dropout research. The following findings are reported: (1) graduates show higher earnings than dropouts; (2) dropouts show higher unemployment rates than graduates; (3) dropouts are three times more likely than graduates to live in poverty; (4) dropouts are overrepresented in the populations served by public services; (5) dropouts report higher public assistance subsidies than do graduates; and (6) a higher proportion of dropouts than graduates reported serious trouble with the law. The paper concludes that enough is known about the individual and social costs of dropping out of school to justify additional public attention to the problem. Statistical data are presented in nine tables. (FMW)

Reproductions supplied by EDRS are the best that can be made





DROPPING OUT OF SCHOOL IN THE NORTH CENTRAL REGION OF THE UNITED STATES:

Costs and Consequences

Prepared for the North Central Regional Educational Laboratory

James S. Catterall
University of California at Los Angeles

One in a Series of Reports on Students at Risk

1988





Copyright, c 1988. North Central Regional Educational Laboratory 295 Emroy Avenue Elmhurst, IL 60126

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without permission in writing from the publisher.

The North Central Regional Educational Laboratory is a nonprofit organization supported in part by the Office of Educational Research and Improvement, U.S. Department of Education. The opinions expressed in this publication do not necessarily reflect the position or policy of the Laboratory or the funding agency, and no official endorsement should be inferred.

NCREL order number:

SAR-712

Price:

\$ 6.00



DROPPING OUT OF SCHOOL IN THE NORTH CENTRAL REGION OF THE UNITED STATES: Costs and Consequences

TABLE OF CONTENTS

Preface to	Series	i
Introductio	n	I
North Cent	tral Region Dropout Costs	4
Table 1:	Mean Anaual Income of School Finishers versus Non-Finishers	6
Table 2:	Expected Individual Lifetime Earnings Differences for High School Graduates versus Non-Graduates, 1968 and 1981	7
Table 3:	Upper-Bound Projected Earnings Loss to Society and Associated Loss of Tax Revenues Linked with Dropping Out of School, High School Class of 1981	8
Table 4:	Unemployment Rates by Age Group and Educational Attainment for the North Central Region and Izdividual States	9
Table 5:	Incidence of Poverty Status for School Finishers versus Non-Finishers by Age Group, Community Type, Race/Ethnicity, and Sex	10
Other Cost	s of Dropping Out	!]
Table 6:	Mean Public Assistance Income of School Finishers versus Non-Finishers by Age Group and State	12
Table 7:	1980 Female Sophomores Receiving Welfare in 1983 by Graduation/ Non-Graduation and Race/Ethnicityl	13
Table 8:	Percentage of Non-Graduate Female 1980 Sophomores Who Were Unwed Mothers or Welfare Recipients in 1983 by Race/Ethnicity	13
Other Soci	al Service Costs of Dropping Out	l 4
Table 9:	Estimated Service Costs to Local Government in the Los Angeles Area Attributed to School Dropouts, 1985	15
Conclusion	sl	16



Preface

Concern continues to mount in this country that perhaps one-third of today's elementary and secondary school students are at risk -- at risk of not finishing or not benefitting from their time in our schools. These children are at risk of losing their opportunity to become productive and competent members of adult society. They are at risk of becoming part of a growing underclass in the richest nation in the world.

Who are these students at high risk of low achievement? They include school dropouts, teenage parents, students with truancy problems, substance abusers, the poor, those isolated in rural areas, and students who have chronic difficulty with schoolwork. They can come from families of all colors, beliefs, backgrounds, and income levels. "Students at risk" is more than a buzz word. It is a condition that some say will continue to escalate to the point of jeopardizing the future of America's economy, domestic security, national defense, and overall standard of living.

NCREL and its regional partners have identified success for ALL students as a theme which will continue to be the focus of significant activities over the next several years. In 1986 NCREL initiated activities to develop information resources. In 1987 the first regional conference was held on the topic of students at risk, followed in 1988 by a second conference addressing this continuing priority.

The roads to preventing and curing students at risk are complex and intricate. Removing roadblocks to their academic success will involve financial resources, social change, and the support of every single institution and person in the community. New programs and strategies are being tried, many with great success. More will be developed as the awareness of the problem and the commitment to solve it become more widespread.



-i- 6

Many, many people have contributed to NCREL's work on the topic of students at risk—through their research efforts, through their participation in the regional conference, through their dedication to creating winners in the classrooms. We are particularly indebted to David Bills, Judi Elliott, Kim Schonert, and Jerry Shive of the University of Iowa; Charles Case, University of Connecticut; James S. Catterall, University of California at Los Angeles; Edgar Epps, University of Chicago; and John Witte, University of Wisconsin - Madison.

NCREL is proud to publish this series of products and to dedicate it to the success of all students.

Jane H. Arends Executive Director

Judson Hixson
Director, R&D Resource Development



Introduction

Non-completion of high school by American youngsters is recognized by many as a serious and perhaps growing problem, particularly in the nation's urban centers. This policy paper, commissioned by the North Central Regional Educational Laboratory, addresses the individual and social costs that have been associated with failing to complete high school. The paper also provides some rough estimates of the magnitude of these costs in the states served by the Laboratory.

A companion paper, <u>Dropping Out of School in the North Central Region of the United States: The Dimensions of the Problem Suggested by Available Data Sources</u>, provides an overview of dropout behavior in the region: the incidence and demographics, the sorts of data that contribute to this picture, and comparisons of regional to national patterns. We must acknowledge at the outset that ascribing particular individual or community costs to the act of dropping out of school cannot be called an established science; we also know from experience that attempts to assign costs can lead to highly charged educational, social, and economic debates.

For these reasons, this discussion begins by describing the underlying perspectives and assumptions that link specific costs to individual and collective pupil attrition. A subsequent section presents data suggesting the extent of some of the claimed tosts. It should not surprise readers that those who leave school on average earn less, and are more likely to be unemployed, more dependent on public assistance, and more likely to live in poverty status. Another pattern in the data shows the chances of experiencing such "costs" to be much higher for black and Hispanic youngsters, and much higher overall in communities with high concentrations of minority families.

Although not shown in the data or analyses described here, a clarification on this last issue is needed. Research addressing the associations of higher dropout rates with minority status suggests that dropout behavior is more _ social class than race/ethnicity phenomenon -- when family income and education levels are held constant, black and Hispanic youngsters do not drop out of school any more frequently than whites. In fact, at very low levels of family income, minorities have been shown to be more likely than whites to finish school.



- 1 -

Underlying Perspectives: Linking Dropouts to Costs

The dominant arguments linking individual and social costs with dropping out of school rest on observations that dropouts face economic and social disadvantages when compared to youngsters who complete their diplomas. A primary and striking difference between the two groups appears in their levels of earnings. Dropouts typically earn far less money than graduates over their lifetimes. Thus a major private or individual cost is suggested. This cost to the individual or family pocketbook can be thought to spill over to the larger socrety in two ways. First, reduced individual productivity and earnings can lead in turn to lower public tax collections. In a society committed to providing a number of socially beneficial services through public agencies (from school lunches to lasers), lost tax collections represent a sacrifice. Second, those who earn less money, and particularly those who earn extremely low wages, are more likely to depend on a variety of public services. Public welfare, health, employment, and transportation services are more frequently used by those who earn less, and vio possess fewer educational credentials, including high school diplomas. High school dropouts are also known to have more entanglements with law enforcement, judicial, and penal systems, probably because reduced economic opportunity is a contributing motive for criminal behavior. As such, some of the costs of crime and crime related services might be pinned on premature school leaving.

The crucial assumption tying these various costs to decisions to drop out of school is worth a brief examination before cost-relevant data are presented. This assumption is that the identifed deficits -- lower earnings and public service costs -- would be reduced or eliminated if those who drop out would instead finish high school. Evaluating this assumption requires answering the question, "Would a typical dropout be better off (e.g. have higher earnings and less public service dependence) if he or she were to finish school instead?" While our intuitions may answer this question with a resounding yes, its resolution is difficult to achieve by direct observation -- any ziven individual simply cannot be both a dropout and a school-finisher at the same time.

When we compare school dropouts to graduates and proceed to catalogue statuses or behaviors, we unavoidably compare 'different' individuals. This raises the possibility that differences between and among individuals lead both to dropping out of school and to reduced employment prospects and other costs. Such factors might include lower measured ability levels or negative attitudes toward core societal values (attributes penalized by both educators and employers). Another might be the possession of characteristics such as race that are discriminated against, overtly or covertly, by



educators and employers. In short, the possibility that dropouts differ from graduates in ways that hamper their life chances implies that prompting would-be dropouts to finish school would not bring to these your geters the same advantages as those now enjoyed by those who complete school.

Fortunately, recent research is shedding some light on this puzzle and tends to show that there is a strong independent and negative effect of the decision to leave school at least as far as success in the labor market is concerned. One suggestion of this research is precisely what many have said to our youth for years, "Finish high school and you will be better off!"

A final controversy surrounding the premises .nderlying the attribution of costs to school dropouts concerns the collective or social costs implied by the large numbers and shares of our youth who do not graduate from high school -- typically 25 percent overall and 40 percent or so in large cities. When the individual earnings deficits for such numbers are agaregated, the numbers are staggering. For example, the typical dropout earns more than \$200,000 less than a graduate over his lifetime (see Table 2). This individual sum extends to hundreds of billions of dollars for the dropouts of a single high school class across the nation (see Table 3). When we ask whether such aggregate costs would be averted by improving national graduation rates, it is accessary to consider the labor market implications of a wholesale change in the numbers of high school graduates. A massive increase in finishers would be expected to depress the earnings of high school graduates generally -- the earnings of new completers would go up in comparison to their expected wages as dropouts, while the earnings of the remaining graduates would decline. In this scenario, an attempt to reduce the costs of dropping out by altering dropout behavior on a national scale would tend to be selfdefeating. The relative value of finishing school would decline, and a possible individual response might be, "Why bother?"

From the point of view of the educator or education olicymaker however, there is probably little immediate need to fret over the complications of such a prospect. Based on the nation's recent record of school completion -- a ratio remarkably stable for two decades -- there appears to be little chance that school graduation will balloon in popularity in the coming years. And based on the author's informal assessment of the

^{1.} See Stern, D., Paik, I., Catterall, J.S., Nakata, Y., "Labor Market Experiences of Teenagers With and Without High School Diplomas." Manuscript under review. Available from Graduate School of Education, 4625 Tolman Hall, University of California, Berkeley, CA 94720.



scale of efforts to do something about dropouts throug! public policies and meaningful budget allocations, no systematic change appears threatening.

This leaves us with some gaiging perspectives on the costs of school dropouts as we turn to some potentially relevant data. It appears that the individual makes a critical choice for himself when he drops out of school -- the decision is likely to have sizeable negative consequences for his employment chances and for his ultimate ability to provide goods, services, and other satisfactions generally valued by us all. Public policies -- educational or other -- that succeed in inspiring more school completion are likely to contribute tangibly to the lives of any newfound successes.

It appears that society would also benefit in turn. Even though the p yoff for dropout preventive activities might decline as more and more youngsters remain in school to graduate, the rewards for the first success, and for the first hundreds of thousands of successes for that matter, are likely to be substantial. And the rewards in any one jurisdiction achieving impressive gains in school completion, such as a particular city school system, should not be considered constrained by the limitations of a circumscribed labor market in the manner assumed for a national market. In any event, achieving quantum levels of improvement on the dropout front probably raises so many challenges that educators or legislators should not be discouraged from this pursuit for fear of too much success.

North Central Region Dropout Costs

We now turn to some of the cost-bearing implications of dropping out of school in the seven-state North Central Region. Most of the data displayed in the tables below were generated from a special analysis of 1980 Census files. This work provided project team members with an exceedingly fine-grained look at the implications of educational attainments, along with other individual characteristics, for such things as earnings, unemployment, public assistance receipts, and poverty status. We also show some cost figures for school dropouts that were obtained by three commonly cited national studies.

Expected Earnings

As a group, those who finish school consistently show higher earnings than those who do not. Table I displays mean annual earnings for men and women in each of the seven states in NCREL's region and for the region as a whole. The principal comparison is earnings differences between individuals who reported finishing just 12 years of school



- 4 -

on the one hand, and those who reported completing from 9 to 11 years of school on the other hand. The rationale for this specific comparison includes the idea that a reasonable goal for dropouts would be simply to finish high school, and that any shortfalls shown in such a comparison form a good basis for first-cut estimates of the cests of not graduating. In addition, we do not dwell on those who report completing 8 or fewer years of school, since this group is probably overpopulated with recent immigrants; these individuals present a host of educational concerns and issues beyond the scope of this discussion.

The mean earnings oatterns in Table 1 harbor few surris. Across the region, recent male graduates earn about 40 percent more than dropouts, female graduates about 50 percent more. Reported disauvantages remain for citizens age 25 and over, but the differences in percentage terms are roughly half of those just cited, 23 percent for males and 24 percent for females. The figures suggest that the earnings costs of leaving school are particularly acute for youth. This observation is consistent with unemployment levels known generally to be high for adolescents. That youthful ironouts have particular earnings deficits is also linked to claims that dropping out of school may contribute to the costs of crime and crime related services. Economic duress is a probable cause of crime, and these figures show that one component of such stress is felt keenly by adolescents, namely their earnings. And reported crime statistics consistently show that younger males account for a disproportionate number of arrests for many crimes.



TABLE 1
MEAN ANNUAL INCOME OF SCHOOL FINISHERS VERSUS NON-FINISHERS
By Age Group and State, North Central Region

	Highest Grade Completed		19-24	Age 25+	
			<u>12</u>	<u>9-11</u>	<u>12</u>
Illinois	male	7543	10235	15277	18949
	female	4189	6034	6631	8265
Indiana	male	7184	10237	14573	17883
	female	3574	5448	6058	7531
Iowa	male	7823	10157	13802	17233
	female	3566	5514	5996	7105
Michigan	male	7453	10496	15219	18652
	female	4067	6064	6264	7942
Minnesota	male	7257	9736	14167	17428
	female	4505	6009	58,	7124
Ohic	male	6667	9842	. 13285	17793
	female	3414	5567	5727	7432
Wisconsin	male	7588	10213	14096	17396
	female	4368	5977	5012	7097
7 States	male	7289	10145	14693	18092
	female	3913	5882	6132	7633

Comment: The above means seem to have been calculated with "all not in school" as a denominator. One implication is that for females, where fractions not in school and not working are undoubtedly higher, mean incomes appear to be quite low. I would expect female-male wage differentials for those who are working to be the 60 to 70 percent range. Many of these are in the 40 percent range.)

A corollary implication is this: If finishing school is associated with higher likelihood of working, the differences in mean earnings shown overstate the gains associated with finishing school. This is because the denominators for non-finishing groups include more people out of the labor market, and the means tend to understate (comparatively) what those actually working are earning.

Source: 1980 Census of Population and Housing, Public-Use Microdata Sample (5% sample).



Table 2 shows more general estimates of earnings differences between high school dropouts and graduates provided in two national studies.² In 1968, Henry Levin estimated that a male high school graduate would earn about \$76,000 more than a dropout over his lifetime. Based on a parallel analysis of Census bureau income projections by this author, the figure for 1981 was \$265,000. Adjusting for price level differences, the earnings implications of acopping out for males appear to have increased in real terms by about 25 percent over this time period. For females, we have only 1981 figures which show earnings differences of about \$200,000 between dropouts and school finishers.

TABLE 2
EXPECTED INDIVIDUAL LIFETIME EARNINGS DIFFERENCES FOR
HIGH SCHOOL GRADUATES VERSUS NON-GRADUATES, 1968 AND 1981

	Males		Females
	1968	1981	1981
Projected Added Earnings if Average Dropout Were to Graduate	\$76,000	\$265,000	\$203,000

The 1981 figures estimated by this author were also extended in his study to illustrate the overall magnitude of earnings deficits experienced by dropouts from each high school class in the nation. Table 3 shows that the nearly one million dropouts from school classes typical of current enrollments accumulate more than \$200 billion in earnings shortfalls over their lifetimes. And since about 30 percent of income is collected in taxes for all levels of government in the United States, the approximate loss in tax revenues associated with the earnings deficits accumulated by a single high school class of dropouts is nearly \$69 billion. These figures are labeled in Table 3 as upperbound estimates because, as discussed above, we would not expect these totals of earnings to be restored if everyone were to graduate from each high school class -- the United States labor market as we know it would simply not absorb such numbers at going wage levels.

^{2.} These studies are: Catterall, J.S., "On the Social Costs of Dropping Out of School," The High School Journal, Fall 1987; Levin, H. M., "The Costs to the Nation of Inadequate Education." Report to the Select Committee on Equal Educational Opportunity, United States Senate, Washington, D.C.: U.S. Government Printing Office, 1972.

TABLE 3 UPPER-BOUND PROJECTED TOTAL EARNINGS LOSS TO SOCIETY AND ASSOCIATED LOSS OF TAX REVENUES LINKED WITH DROPPING OUT OF SCHOOL, HIGH SCHOOL CLASS OF 1981

Gender	Grade 8 Enrollment	Dropouts	Indiv. Earns. Losses	Total Lost Earnings
Male Female	1.9 million 2.0 million	513,000 460,000	\$265,000 \$203,000	\$135.9 billion <u>\$ 93.4 billion</u>
			TOTAL	\$229.3 billion
Loss of T	\$ 68.8 billion			

Unemployment Rates

School dropouts also consistently show higher unemployment rates than graduates. Table 4 displays unemployment rates for individuals reporting completion of various levels of education for each of the region's seven states and for the region as a whole. In general, the comparisons between those who finished 12 years and those who finished between 9 and 11 years of schooling mirror the earnings differences shown in Table 1. Unemployment rates for those age 19-24 across the region are high for both groups—more than 14 percent for graduates and 10 percent for dropouts. As we noted for average earnings, the differences between dropouts and graduates are somewhat less for older citizens.



⁻⁸⁻ 15

TABLE 4
UNEMPLOYMENT RATES BY .GE GROUP AND EDUCATIONAL ATTAINMENT
FOR THE NORTH CENTRAL REGION AND INDIVIDUAL STATES
(Percentages Unemployed)

Age < Educational Attainment in Years>								
State	Greup	<u>0-8</u>	<u>9-11</u>	<u>12</u>	<u>13-15</u>	<u>16</u>	<u>17+</u>	All Levels
Illinois	18-24	13.5	13.8	8.8	4.6	3.2	2.8	8.5
	25+	3.5	5.1	3.8	3.4	1.8	1.4	3.5
Indiana	18-24	14.1	14.9	5.8	4.5	2.9	2.1	9.4
	25÷	3.1	5.3	4.0	3.1	1.6	1.1	3.6
Iowa	18-24	13.6	10.2	7.2	3.5	2.2	2.4	6.6
	25+	1.9	3.2	2.6	2.1	1.3	0.9	2.2
Michigan	18-24	17.6	18.1	13.9	7.1	5.0	3.0	12.7
	25+	4.2	7.3	5.9	4.8	2.5	1.7	5.2
Minnesota	18-24	10.0	9.3	7.4	3.3	1.4	1.6	6.2
	25+	2.4	4.2	3.4	2.5	1.4	4.6	2.8
Ohio	18-24	13.1	14.4	10.4	5.3	3.7	1.8	9.8
	25+	2.9	5.3	4.1	3.3	1.7	1.3	3.7
Wisconsin	18-24 25÷	13.2	12.2 4.7	8.9 3.8	4.1 3.3	3.2 1.8	2.8 1.4	8.0 3.2
7 States	18-24 25+	3.1	5.5	. 4.2	3.5	1.8	1.4	3.7

Source: 1980 Census of Population and Housing, Public-Use Microdata Sample (5% sample).

Unemployment rate comparisons across states show considerable variation, much more than cross state differences in mean earnings shown in Table 1. Unemployment rates in Michigan for finishers and dropouts alike were twice those reported in Minnesota. Readers may recall that Michigan and its auto industry were particular casualties of a national economic recession at about the time of the 1980 Census.

Poverty Status

The distributions of earnings and assistance income shown above reflect average differences in economic well-being. Table 5 reveals one characteristic of the .ess fortunate tail of the personal income distribution. It appears that the implications of



dropping out of school are particularly acute when the measured outcome (or the measured association, anyway) is poverty status. The chances of living with a household income classified as below the poverty line are roughly three times higher for school dropouts than for those who simply finish grade 12.3 More than 30 percent of young female dropouts live in poverty status as compared to about 10 percent of young female graduates. For older females, the fractions in poverty are about half those of their inder-25 counterparts, with the expected advantage for graduates. In percentage terms, the problem of poverty status for males is less severe than it is for women, but the difference between graduates and dropouts is about the same -- male dropouts are three times as likely to be found in poverty.

TABLE 5

INCIDENCE OF POVERTY STATUS FOR
SCHOOL FINISHERS VERSUS NON-FINISHERS
BY AGE GROUP, COMMUNITY TYPE, RACE/ETHNICITY, AND SEX
(Percentages for the North Central Rregion))

III:abaat Caada	Age l	9-24	Age 2	25+
Highest Grade Completed	9-11	12	9-11	12
All	23.2	8.2	11.8	5.9
Urban	29.2	11.2	15.3	7.5
Suburb	16.8	5.8	8.3	4.3
Rurai	21.2	8.3	11.9	7.1
White	18.7	6.5	9.5	5.1
Black	41.2	25.1	26.3	16.9
Hispanic	26.6	12.6	17.5	9.6
Male	16.6	5.3	8.1	4.6
Female	30.3	10.3	14.8	6.9

Source: 1980 Census of Population and Housing, Public-Use Microdata Sample (5% sample).

^{3.} Poverty status is 7. Census Bureau designation based on household income and family size and composition.

Other Costs of Dropping Out

The earnings and employment estimates shown above point to unambiguous differences between school dropouts and school finishers. A range of other public costs have been associated with undereducation and dropping out of school, but the precise differences between graduates and dropouts are more problematic if individual or social costs are the object of comparison. Nonetheless, some research and analysis has proceeded with these questions, and the NCREL Census files contain some informative figures for public assistance expenditures. We turn now to some of the public service areas which may be affected by school dropouts.

Dependence on Public Assistance

Table 6 displays data on public a sistance income that are rare inclusions in discussions of the costs of dropping out of school. The NCREL work with the Census files presents a first time look at such figures, at least according to our wide survey of available data and analyses.



- 11 -

TABLE 6 MEAN PUBLIC ASSISTANCE INCOME OF SCHOOL FINISHERS VERSUS NON-FINISHERS BY AGE GROUP AND STATE (North Central Region)

Highest Condo	Age 19-24		Age 25+	
Highest Grade <u>Completed</u>	<u>9-11</u>	<u>12</u>	<u>9-11</u>	<u>12</u>
Illinois	2234	2085	2639	2541
Indiana	1660	1403	2031	2646
Iowa	2358	2088	2504	2646
Michigan	2678	2388	3092	3002
Minnesota	2502	2343	2672	2575
Ohio	1975	1684	2301	2202
Wisconsin	3112	2537	2753	2669
7 States all male female	2331	_085	2632	2577
	1587	1590	2448	2650
	2512	2214	2694	2654

Comment: I have not determined the denominator used to calculate these means. Whether the mean assistance income is for all persons in each category, or rather for all receiving public assistance income in each category is a critical question. I suspect that it is the former, so these data do not tell us too much about the relationship between attainment and dependence on public assistance.

Source: 1980 Census of Population and Housing, Public-Use Microdata Sample (5% sample).

Female school dropouts consistently report higher public assistance subsidies than school finishers. Average public assistance subsidies for females are about 13 percent higher for non-graduates than for graduates. Males stand in contrast -- the data in Table 5 show no appreciable differences between dropouts and graduates. Female public assistance recipients undoubtedly outnumber male recipients because of the provisions of the nation's principal welfare program, Aid to Families With Dependent Children; thus the region and state overall patterns show consistently higher average subsidies for dropouts.

For those age 25 and over, public assistance income differences between school finishers and non-finishers are negligible, about two percent more in average receipts for non-graduates. As we observed with earnings and unemployment patterns, the implications



of dropping out of school seem most severe for the first few years, and appear to decline but not disappear in later years.

Table 7 displays data on welfare participation by females who were high school sophomores in 1980. Based on the High School and Beyond survey's national sample of about 15,000 sophomore females, those who had not graduated as of 1983 (a year after their classes had graduated) were much more likely to be receiving welfare assistance.

TABLE 7 1980 FEMALE SOPHOMORES RECEIVING WELFARE IN 1983 BY GRADUATION/NON-GRADUATION AND RACE/ETHNICITY

	High School Graduates	Non-Graduates	
Hispanics Blacks Whites	2% 8% 2%	20% 28% · 14%	

High School and Beyond data also indicate that, at least for minorities, the numbers of non-graduate females reporting to be unwed mothers was even larger than that number reporting welfare receipts. These figures are shown in Table 8.

TABLE 8
PERCENTAGE OF NON-GRADUATE FEMALE 1980 SOPHOMORES WHO WERE UNWED MOTHERS OR WELFARE RECIPIENTS IN 1983 BY RACE/ETHNICITY

	Welfare Recipients	Unwed Mothers
Hispanics	20%	22%
Blacks	28%	38%
Whites	14%	12%



Other Social Service Costs of Dropping Out

Discussions of school dropouts frequently claim that the undereducation (and underemployment) of school dropouts leads to increased needs for a range of public services; some relevant argum _.s were outlined briefly in the introduction above. The connections between inadequate personal and family income and the needs for such things as public health, transportation, and employment services, along with crime prevention and criminal justice systems, are almost certainly positive and widely accepted as such. And the general association between added education, including finishing school, and increased income is beyond challenge even if the precise reasons are debated. Just what the public service costs tied to school dropouts are, or to turn the question around, what public expenditures might be saved if more youngsters should graduate instead of leaving school, are difficult questions to answer with precision or confidence. In his 1972 study, Levin estimated the costs of some of these services on the basis of inferences grounded in behavioral and policy research. Using conservative choices where ranges were thought to be appropriate, he found that about one-fourth of the costs of crimerelated and welfare services could be attributed to the undereducation represented by decisions to drop out of school. He also estimated that about 15 percent of employment related services could be so attributed.

Since the budgets for these services amount to hundreds of millions of dollars in most urban settings, using these fractions as dropout-generated costs leads to impressive dollar estimates. Figures from a recent Los Angeles study by the author are shown in Table 9.



· 14 · 21

TABLE 9 ESTIMATED SERVICE COSTS TO LOCAL GOVERNMENT IN THE LOS ANGELES AREA ATTRIBUTED TO SCHOOL DROPOUTS, 1985

City Police Services	\$ 125	million
Crime Related County Services	225	н
(Judicial and Penal)		
City Employment Services	8	н
County Welfare Services	40	н
County Health Services	_90	
TOTAL	\$ 488	million

Source: J.S. Catterall, "On the Social Costs of Dropping Out of School," The High School Journal, 7!(1), Oct./Nov. 1987.

Such estimates must be considered very rough and their specific magnitudes difficult to defend. Although the calculation basis used by Levin is thoughtful and well-reasoned, just what would happen to public service demand if dropping out of school should fall in popularity is an empirical question. Would new graduates find jobs? Would aggregate earnings of youth increase, thereby reducing dependence on public services? Would the service agencies involved suffer reduced budgets as a result of lower demand for services, or would they find new clientele and new missions to ensure their continued budgets? Would tax sayings be reallocated and to what purposes? These questions only begin to sketch the complexity of the question.

An alternative but largely untried approach to describing the public service costs of dropping out of school would be to catalogue the participation rates of citizens in various public services by education level. For example, we found in national High School and Beyond data that among 1980 sophomores about 1 in 8 of those who dropped out reported serious trouble with the law by 1982; the ratio for graduates was 1 in 33. This suggests a direct connection between dropping out of school and the costs of crime. Welfare rolls, patient resters at public hospitals and clinics, prison rolls, and arrest logs would surely reveal similar overrepresentations of school dropouts and the less educated generally. The more dramatic the imbalance of these distributions toward school dropouts, the more impact such figures would have as a rationale for public policies which would address the issue of leaving school. No attempt has yet been made by the Database Team to collect such figures.



Conclusions

This policy paper focused on two major issues. First it outlined the primary arguments that link non-completion of high school to individual and social costs. Then the discussion provided estimates of some of the costs involved.

The paper began with an examination of the assumptions made by researchers, educators, or policymakers when they say that there are substantive costs associated with dropping out of school. The topic was approached from the point of view of both the individual and society. Private costs are incurred by the individual who leaves school without graduating in the form of reduced earnings, higher chances of being unemployed, and higher likelihood of involvement with crime and the judicial system. Social costs appear in the form of lower total productivity of the labor force, lower tax collections, and higher needs for a variety of public services such as welfare, health, and employment services.

A critical assumption in assigning costs to the act of dropping out of school (or to the collective magnitude of this behavior in society) is that the costs would be reduced if would-be dropouts should instead finish school. The paper examined the foundations of this assumption and concluded that while there may be limits to the cost savings expected from dramatically successful dropout prevention policies, these limits are not so great that such policies are not worth pursuing.

Various data on the individual and social costs were presented for the nation, the region, and for the seven states in the region. Earnings and employment differences between school grad ates and dropouts are well described in Census Bureau reports and data files. Dropouts are expected to earn on average more than \$200,000 less an students who simply finish high school. Regional data show annual incomes of non-finishers to be nearly 30 percent less than school finishers who did not go on to college. Young adult dropouts report unemployment rates 40 percent higher than school finishers. Dropouts in this age group are three times as likely to live a poverty status household, and they receive about 15 percent more in public assistance payments than school finishers.

The costs of dropping out of school in terms of public services are difficult to estimate precisely for reasons discussed in the paper. Nonetheless, the populations served by public services such as welfare, health, and prisons overrepresent school dropouts. More educational attainment for these persons would probably have lead to less dependence or



- 16 -

involvement with these institutions. The rough size of some of these costs -- and potential savings -- are discussed.

An overall conclusion of the property is that we know enough about the individual and social costs of dropping out of school to provide convincing rationales for public attention to the problem. The paper provides some guidance for additional analysis which would provide added strength to such arguments.

ERIC Full text Provided by ERIC

Cover Design & Illustration: JML Design Studio



U.S. Dept. of Education

Office of Educational Research and Improvement (OERI)

ERIC

Date Filmed

July 11, 1991

